

Materials Science

BIMETALLIC PLATINUM-IRON DENDRIMER ENCAPSULATE CATALYSTS

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In this presentation methods for the preparation and characterization of bimetallic Pt-Fe dendrimer-encapsulated nanoparticles (DENS) are described. Conditions for loading Fe and Pt salts into G6-OH PAMAM dendrimers both separately and together were experimentally tested and the products of those tests were examined by a variety of methods with emphasis on co-complexation approaches. Progress toward the ultimate goal of bimetallic Pt-Fe DENS is summarized and future work for attaining the goal of Pt-Fe DENS through sequential loading of the metals is proposed in perspective of the results thus attained.